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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,728	03/03/2004	Cheul Kyung Han	1630-0369PUS1	2625

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EXAMINER
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NGUYEN, LINH THI

ART UNIT	PAPER NUMBER
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2627

NOTIFICATION DATE	DELIVERY MODE
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08/25/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/790,728	HAN, CHEUL KYUNG	
	<b>Examiner</b>	<b>Art Unit</b>	
	LINH T. NGUYEN	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-7, 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Takeda (US Publication Number 20030043714).

In regards to claims 1 and 9, Takeda discloses a method and apparatus for recording data on an optical disc (Fig. 1) comprising the steps of: performing optimum power calibration on a test area of the optical disc to detect optimum writing power (Fig. 12); determining an optimum write strategy (Fig. 12); writing information on a data area with the optimum writing power and the optimum write strategy (Fig. 13); determining whether or not a running optimal power calibration (ROPC) is necessary based on a B-level and a RF signal level detected in the writing step (Fig. 13, S412); determining whether or not a current writing power is within a predetermined ROPC range (Bo) set with reference to the detected optimum writing power (Fig. 13, S412); and performing a writing operation by increasing the writing power based on power update information when the current writing power is not within the predetermined allowable range (Paragraph [0093], lines 1-6).

In regards to claims 2 and 11, Takeda discloses the method and apparatus, wherein the step comprises the steps of comparing a current writing position with previously stored position information corresponding to the predetermined ROPC range (Bo), and determining, based on the result of the comparison, whether or not the current writing power is within the predetermined ROPC range set with reference to the detected optimum writing power (Paragraph [0090]).

In regards to claims 3 and 12, Takeda discloses the method and apparatus, wherein the position information corresponding to the predetermined ROPC range is detected based on a disc type or a writing speed associated with the optical disc (Paragraph [0084], disk type CD-R, RW and DVD-R).

In regards to claims 4 and 10, Takeda discloses the method and apparatus, wherein the current writing position is detected from absolute time in pre-groove data detected from a wobble signal generated in association with the optical signal (Paragraph [0045]).

In regards to claims 6 and 13, Takeda discloses the method and apparatus, wherein the power update information includes power information based on position information (Paragraph [0086]).

In regards to claims 7 and 14, Takeda discloses the method and apparatus, wherein the power update information includes information about a variation in writing power (Plim) at a predetermined writing interval (Paragraph [0094]).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 8 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda in view of Ogawa (US Publication number 20030161237).

In regards to claim 5, Takeda discloses the method according to claim 1, wherein the predetermined ROPC range of the writing power and/or the power update information is detected based on a disc type (Paragraph [0084]). However, Takeda does not disclose the different writing speeds to correspond to the different disc types.

In the same field of endeavor, Ogawa discloses a variety of speeds correspond to the different disc type (Figs. 5, 6, and 7). At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the method of updating the OPC of a disk depending on the disc type as taught by Takeda to also depend on the

speed as taught by Ogawa. The motivation for doing so would have been to record with an optimum power level at a high speed.

In regards to claims 8 and 15, Takeda does not but Ogawa discloses the method and apparatus, wherein the step of increasing the writing power based on the power update information is carried out when the writing operation is performed at a writing speed higher than an appropriate writing speed of the optical disc (Paragraph [0055] and Figs. 5, 6 and 7). The motivation is the same as claim 5 above.

In regards to claims 16 and 17, Takeda does not but Ogawa discloses the method and apparatus, further comprising performing the writing operation with the writing power controlled to maintain a reflection signal level corresponding the detected optimum writing power when the current writing power is within the predetermined allowable range (Paragraph [0039]). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the method of Takeda to maintain a reflection level corresponding to detecting optimum writing power as suggested by Ogawa. The motivation for doing so would have been to perform at an optimum recording power levels in real time.

### ***Response to Arguments***

Applicant's arguments filed 5/29/08 have been fully considered but they are not persuasive. Applicant argues that Takeda does not "determine whether or not a running

optimal power calibration (ROPC) is necessary base on a B-level and a RF signal level detected in the writing step.” However, Takeda clearly discloses data recording and processing ROPC when necessary (Fig. 13, step 412; Paragraph [0092]). Figure 12 shows the initial start-up of the a disc and performing OPC of the returned light intensity the B-level value under standard strategy Str and the returned light intensity the B-level value under low-power strategy Stl (Paragraph [0087]) further set as the target value Bo (Paragraph [0090]). After the optimum power is set, data recording process begins and processing ROPC is perform (Fig. 13). Figures 13 show that record data start in step 410, detects the returned light intensity from recording mark step 411. As the returned light is detected to compare with the target Bo value (optimum value) if that returned light match indicating that it is at an optimum condition the data recording continue to step 410 (Paragraph [0092]), therefore, not necessary to increase power and process the ROPC. On the other hand, if the returned light does not match the Bo value, the increase of power level to calculate the optimum recording power level for the low power strategy Stl (Fig. 13, S416 and 417). Figures 14 and 15 show further of the optimum processing of step 416 and 417 (Paragraph [0097]-[0099]; further shows the ROPC processing of calculating the target value of returned light intensity for low-power strategy Stl). Therefore, claims 1 and 9 are not patentable in view of Takeda.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH T. NGUYEN whose telephone number is (571)272-5513. The examiner can normally be reached on 10:00am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the



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Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TAN Xuan DINH/  
Primary Examiner, Art Unit 2627  
August 14, 2008

LN  
August 12, 2008